| 1. | **Introduction** |
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| | This policy outlines the standards of Apollo Hospitals, Secunderabad for the prevention and management of the deteriorating patient and aims to reduce patient harm which can occur from the risk of deterioration incidents. This policy highlights the importance of using early warning signs which are commonly used for the assessment of patients who are clinically deteriorating; these observations can detect when a patient's condition requires a more intense observation and should be a trigger for further investigation as early intervention can reduce morbidity and mortality in unwell patients (NICE 2007, NPSA 2007).<br><br>Patients who are at risk of deteriorating may be identified before a serious adverse event by monitoring changes in physiological observations recorded by healthcare staff. The interpretation of these changes and timely institution of appropriate clinical management once physiological deterioration is identified is of crucial importance to minimize the likelihood of serious adverse events, including cardiac arrest and death.<br><br>The purpose of this policy is to provide guideline how staff can provide clinical care to promote early detection, prevention and management of deteriorating patient by:<br>• Standardizing practice for clinical staff in the early detection of clinical deterioration with the aim of preventing further deterioration and possible subsequent cardio-respiratory arrest.<br>• Facilitating the early detection of deterioration by using alert levels and alert |

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| | values for the appropriate and timely management of clinical deterioration.<br>• Reducing the clinical risks associated with inappropriately managed clinical conditions. | |
| **2.** | **Scope** | |
| | This policy document applies to all the clinical areas where inpatients are treated in Apollo Hospitals, Secunderabad | |
| **3.** | **Abbreviations** | |
| | 3.1. | **RN:** Registered Nurse |
| | 3.2. | **FHR:** Fetal Heart Rate |
| | 3.3. | **BP:** Blood Pressure |
| **4.** | **Definitions** | |
| | **Medical emergency** signifies a medical condition that manifests itself through signs and symptoms wherein a failure to receive immediate medical attention would compromise the health status of a person, placing his/her life in serious jeopardy. | |
| | **Nurses Observation Chart:** To facilitate standardization and to track a patient's clinical condition, a clinical chart has been developed to record vitals and routine clinical data. This tracking will alert the nurses of any untoward clinical deterioration and also clinical recovery. | |

| 5. | Procedures and Responsibilities | | |
|---|---|---|---|
| | # | Procedures | Responsibility |
| | 5.1. | If the patient has any physiological sign(s) that is outside of the normal range (as per Early Warning Scores given in the annexure) indicating a potential for patient deterioration, the nursing staff shall document the same in Nurses Observation Chart. | RN |
| | 5.2. | Based on patient's age, physiological parameters and Early Warning Score, RN shall appropriately respond and shall escalate the issue to the CONSULTANT/Physician on duty. Same shall be documented and immediate nursing management shall be started. | RN |
| | 5.3. | CONSULTANT/Physician shall use their clinical judgment to determine the most appropriate clinical intervention and escalate the care accordingly to meet the patient health needs. | CONSULTANT/Physician |
| | 5.4. | If the patient does not show any of Early Warning Signs, emergency support may still be called if there is a reasonable doubt concerning the overall condition of the patient. If RN has any concern about a patient, same shall be escalated regardless of the physiological values. | RN |
| | 5.5. | ***Staff Training*** | |

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|---|---|---|---|
| | 5.5.1. | Training on the Early Warning Signs shall be given during the orientation and induction program of the new staff. Periodic refresher training shall also be provided to all nursing staff. | Nursing Head & Human Resources Department |
| **6.** | **Annexures/Related Documents** | | |
| | 6.1. | Early Warning Scores & Response to Scores – Adult | |
| | 6.2. | Early Warning Scores & Response to Scores – Obstetric | |
| **7.** | **Reference** | | |
| | 7.1. | NABH STANDARD AAC 5f | |
| | 7.2. | Deteriorating Patient Policy - Wirral Community Hospital - NHS Trust | |

**EARLY WARNING SCORES – ADULT**

| **Physiological Parameters** | **3** | **2** | **1** | **0** | **1** | **2** | **3** |
|---|---|---|---|---|---|---|---|
| Respiratory Rate (per min) | ≤8 | | 9-11 | 12-20 | | 21-24 | ≥25 |
| O2 Saturation (%) | ≤91 | 92-93 | 94-95 | ≥96 | | | |
| Any suppl. oxygen | | Yes | | No | | | |
| Temperature (°C) | ≤35 | | 35.1-36 | 36.1-38 | 38.1-39 | ≥39.1 | |
| Systolic BP (mmHg) | ≤90 | 91-100 | 101-110 | 111-219 | | | ≥220 |
| Heart Rate (per min) | ≤40 | | 41-50 | 51-90 | 91-110 | 111-130 | ≥131 |
| Level of Consciousness | | | | A | | | V, P, U |

| (Response to) | | | | | | | |
|---|---|---|---|---|---|---|---|

(A: Alert V: Voice P: Pain U: Unresponsive)

**RESPONSE TO SCORE**

| Total SCORE | CLINICAL RESPONSE |
|---|---|
| 0 | Continue routine monitoring as clinically indicated. |
| 1 | RN to review the patient condition immediately and then at two hours interval. |
| 2 | RN to review the patient condition immediately and repeat the observations one hourly, initiate appropriate nursing management, CONSULTANT/on-duty physician to be informed and his/her instructions to be followed as per hospital policy. |
| 3-5 | RN to review the patient condition immediately and repeat the observations one hourly, initiate appropriate nursing management, CONSULTANT/on-duty physician to be informed, CONSULTANT/on-duty physician shall physically review the patient as early as possible (within 30 minutes). |
| 6-7 | RN to review the patient condition immediately and repeat the observations every half hourly, initiate appropriate nursing management, CONSULTANT to be informed who shall review the physically review patient immediately. |
| >7 | Initiate **Code Blue**, Inform CONSULTANT and intensive care |

If you are concerned about a patient, do escalate the care regardless of the score.

**EARLY WARNING SCORES – OBSTETRIC**

| SCORE | 0 | 1 | 2 | 3 |
|---|---|---|---|---|
| CONSIOUS LEVEL | Alert | Responds to voice | Response to pain | Unresponsive |
| RESPIRATION (Breaths/min) | 9-20 | 21-24 | 25-29 | <8 OR >30 |
| PULSE (Beats/min) | 60-100 | 101-110 | 41-60 OR 111 TO 129 | <40 OR >130 |

| | | | | |
|---|---|---|---|---|
| SYSTOLIC BP (mm of hg) | 100-140 | 141-160 | 91 TO 99 | <90 OR >161 |
| DIASTOLIC BP (mm of hg) | 70 T0 90 | 91 TO 99 | 100 TO 109 | <40 OR >110 |
| TEMPERATURE ($^0$C) | 36 - 37 | 35.5 OR 37.5 | 35 OR 38 | <34.5 OR > 39 |
| $O_2$ SATURATION (%) | >96 | 94-95 | 91-94 | <90 |
| URINE OUTPUT | Has passed urine in last 4 hrs | Has not passed urine last 3 hrs | Has not passed urine in last 4 hrs | Has not passed urine in last 6 hrs |
| URINE PROTEIN | No | + | ++ | +++ |
| AMNIOTIC FLUID | Clear/Pale | Red/Mild Green | Dark green | Foul smelling |
| FHR | 120-160 b/min | 110-120 /160-170 | <100 - >170 | <90 and >180 |
| UTERUS | firm and well contracted uterus | High fundus, bleeding continues when massage is stopped | Flaccid and boggy uterus | Atonic uterus |
| BLEEDING | Minimal bleeding | Moderate bleeding >500 ML. H/O bleeding disorders, Looks unwell | Large clots and >1000ML | Severe bleeding with >1500 ml |

| Total SCORE | CLINICAL RESPONSE |
|---|---|
| 0-2 | Antenatal daily observations, Postnatal at least 12 hourly observations |
| 3-5 | Inform senior nurse & CONSULTANT within 30 minutes |
| ≥6 | Inform shift-in-charge, specialist and Anaesthetist within 10 minutes |

If you are concerned about a patient, do escalate the care regardless of the score.

**RAPID RESPONSE TEAM:**

All though based on patient's age, physiological parameters and Early Warning Score, RN shall appropriately respond and shall escalate the issue to the CONSULTANT/Physician on duty, we have a separate team for identifying early warning signs of clinical deterioration for initiating prompt intervention during their rounds in wards daily.

Team members constitute.

1. Intensivist on Duty
2. Doctor on duty
3. Nursing superintendent
4. In charge Nurse
5. Pharmacist